ABSTRACT OF THE DISCLOSURE

A method for detecting a spurious timeout in a TCP network which can be used to avoid unnecessarily triggering the TCP rate adaptation is disclosed. Upon detection of a timeout on a given packet, a shortened packet version of the possibly lost packet is retransmitted. The retransmitted packet is at least one byte shorter than the original packet. The node receiving this retransmitted packet will acknowledge the receipt of the packet as specified in the TCP protocol. The acknowledgment will contain the sequence number of the lowest byte the receiving node has not yet received. Because the retransmitted packet is shorter than the original packet, the sequence number of this as yet not received byte will be less than or equal to the last byte of the original packet if the original packet was not received indicating a valid timeout. If the sequence number in the acknowledgment is greater than the last byte of the original packet than the original packet was received correctly and the timeout was caused by a lost acknowledgment and is considered a spurious timeout. In the case of a spurious timeout the congestion control mechanisms in the TCP protocol need not be used.